Application No.: 10/709,715

Docket No.:11586-US-PA

<u>AMENDMENTS</u>

Please amend the application as indicated hereafter.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A driving method for a pixel array, at least one row of the

pixel array comprising a plurality of pixel sets, and at least one of the pixel sets comprising a

plurality of pixels, the driving method comprising:

providing a plurality of voltages having substantially same phase to a plurality of pixel

electrodes of the pixels of one of the pixel sets;

providing at least two voltages with phases substantially opposite to each other to the

pixel electrodes of the pixels of two of the adjacent pixel sets respectively, wherein a Ith pixel set

comprises W pixels, a pixel of the Ith pixel set in xth row and yth column is expressed as P_I(x,y),

and I, W, x, y are integers;

driving pixels $P_I(x,y)$, $P_K(x+1,y+1)$, $P_I(x,y+2)$,..., $P_K(x+1,y+W-2)$, $P_I(x,y+W-1)$,

 $P_{J}(x,y+W)$, $P_{L}(x+1,y+W+1)$, $P_{J}(x,y+W+2)$,..., $P_{L}(x+1,y+2W-2)$, $P_{J}(x,y+2W-1)$ by a first gate line.

wherein Kth, Jth, and Lth pixel sets adjacent to the Ith pixel set comprise W pixels respectively,

and K, J, and L are integers; and

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driving pixels $P_K(x+1,y)$, $P_O[[M]](x+2,y+1)$, $P_K(x+1,y+2)$,..., $P_O[[M]](x+2,y+W-2)$,

 $P_L(x+1,y+W)$, $P_N(x+2,y+W+1)$, $P_L(x+1,y+W+2)$,..., $P_N(x+2,y+2W-2)$, $P_{K}(x+1,y+W-1),$

P_L(x+1,y+2W-1) by a second gate line, wherein Oth and Nth pixel sets adjacent to the Kth and Lth

pixel sets comprise W pixels, and O,N are integers.

Claim 2 (original) The driving method of claim 1, wherein each of the pixel sets

comprises three pixels.

Claim 3 (original) The driving method of claim 1, wherein a number of the pixels of each

of the pixel set is 3*M, wherein M is a positive integer.

Claim 4 (cancelled)

Claim 5 (currently amended) A driving method for a pixel array, the pixel array

comprising a plurality of pixels, the pixel array corresponding to a plurality of gate lines and a

plurality of data lines, the pixels respectively corresponding to a plurality of pixel electrodes each

row of the pixel array comprising at least one pixel set, at least one of the pixel set comprising a

plurality of pixels, and each pixel set corresponding to a data line set, the driving method

comprising:

grouping the pixels in each row into a plurality of pixel sets logically;

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driving two adjacent pixels in two of the pixel sets in the same row respectively by the

same gate line;

driving a first pixel and a second pixel in the same pixel set by two different gate lines

respectively, wherein the first pixel and the second pixel are in two adjacent columns

respectively; and

driving the pixels in each column respectively by the same data lines, wherein the driving

polarities of the adjacent data lines are opposite to each other,

wherein when the gates line are sequentially enabled, the driving polarities of the pixel

electrodes of the pixels in the same pixel set are substantially the same and the driving polarities

of the pixel electrodes of the pixels respectively in the adjacent pixel sets are substantially

opposite to each other.

determining whether a prior data line and a recent data line belong to same data line set

or not;

wherein when the prior data line and the recent data line do not belong to same data line

set, the recent data line is used to drive the pixel disposed neighboring the pixel driven by the

prior data line, and the pixel driven by the prior data line and the pixel driven by the recent data

line are in the same row and driven by the same gate line; and

when the prior data line and the recent data line belong to same data line set, the recent

data line is used to drive a pixel disposed in another row apart from the pixel driven by the prior

data line, wherein the pixel driven by the prior data line and the pixel driven by the recent data

line are driven by the same gate line.

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Claim 6 (original) The driving method of claim 5, wherein each of the pixel sets comprises three pixels.

Claim 7 (original) The driving method of claim 5, wherein a number of the pixels of each of the pixel set is 3*M, wherein M is a positive integer.